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and U.S. Patent Application No. 09/620,526 of B. Novich et al. entitled "Impregnated Glass Fiber Strands and Products Including the Same" filed same date as the instant application.--

**REMARKS**

**I. Status of the Claims**

Claims 1-58 are pending in this Application. Claims 4, 6-11, 29-39 and 48-58 were withdrawn from consideration by the Examiner.

**II. Information Disclosure Statement**

Applicants thank the Examiner for attaching to the Office Action dated October 23, 2002, an initialed Form PTO-1449 indicating that the documents submitted in the Information Disclosure Statement filed May 16, 2001, were considered. However, initialed copies of the Forms PTO-1449 listing the documents submitted in the Information Disclosure Statement filed April 2, 2001, were not attached. Accordingly, Applicants respectfully request that the Examiner indicate that the documents listed on the Forms PTO-1449 were considered by making the appropriate notations on these papers, and returning the initialed Forms PTO-1449 with the next communication. A copy of the previously filed Forms PTO-1449 is enclosed for the Examiner's convenience.

**III. Objection to the Specification**

Applicants respectfully submit that the objection to the specification set forth on page 2 of the Office Action has been rendered moot by the foregoing amendments.

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**IV. Rejection Under 35 U.S.C. §102(b)**

**A. Rejection over Japanese Patent Publication No. 208,268 ("Sugano")**

Claims 1-3, 5, and 12-20 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Japanese Patent Publication No. 208,268 (hereinafter referred to as *Sugano*) for reasons discussed at page 3 of the Office Action. According to the Examiner, *Sugano* teaches a reinforced laminate comprising a coating composition containing inorganic particles and, further, that the coating composition comprises a film-forming material and at least one lubricious material different from the particles. Applicants respectfully traverse this rejection for at least the reasons that follow.

A rejection under § 102 is proper only when the claimed subject matter is identically described or disclosed in the prior art. *In re Arkley*, 455 F.2d 586, 587 (C.C.P.A. 1972). "For anticipation under 35 U.S.C. § 102, the reference must teach every aspect of the claimed invention either explicitly or impliedly." M.P.E.P. § 706.02 (8<sup>th</sup> ed. 2001). Moreover, in order to anticipate the claimed invention, a reference must clearly and unequivocally disclose the claimed composition to one of ordinary skill in the art "without any need for picking, choosing and combining various disclosures." *In re Arkley*, 455 F.2d at 587. Importantly, missing elements may not be supplied by the knowledge of one skilled in the art or the disclosure of another reference. See *Structural Rubber Prods. Co. v. Park Rubber Co.*, 749 F.2d 707, 716, 223 U.S.P.Q. 1264, 1271 (Fed. Cir. 1984).

Applicants respectfully submit that the rejected claims are patentably distinguishable from the prior art. Coating and slashing size typically include constituents that are not compatible with polymeric resin materials used to impregnate

woven fabric incorporating the coated yarns, e.g., when the fabric is used as reinforcement in laminates for printed circuit boards or other types of electronic supports. As a result, these coatings must be removed from the fabric, e.g., by de-oiling, heating cleaning and/or scrubbing, prior to incorporation of the matrix material. See page 3 of the present specification.

Upon careful inspection, Applicants believe that *Sugano* does not disclose a non-degreased fabric as recited in claim 1. Rather, *Sugano* discloses, for example, a binder for a glass fiber that must be de-oiled prior to incorporation of the fiber into a resin. Specifically, claim 1 of *Sugano* contains a proviso that "binder for [the] glass fiber [is] to be heat de-oiled . . . ." *Sugano*, at 2. In contrast, claim 1 recites a non-degreased fabric; thus, the fiber of the fabric need not be de-oiled prior to incorporation of the fabric with a resin. Consequently, *Sugano* does not teach every aspect of the claimed invention either explicitly or impliedly.

Finally, in response to the Examiner's assertion on page 3 of the Office Action that "[p]roperties such as the thermal conductivity, Mohs' hardness, and LOI are inherent in the particles and laminate of *Sugano*," Applicants submit that the LOI is a property of the coating, rather than the particles. Additionally, the Federal Circuit has explained that "[i]nherency . . . may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient." *Continental Can Co. USA, Inc. v. Monsanto Co.*, 20 U.S.P.Q.2d 1746, 1749 (Fed. Cir. 1991); M.P.E.P. § 2112 ("[t]he fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic.") (emphasis added).

When asserting inherency, it is the Examiner's burden to provide factual and technical grounds establishing that the claimed feature necessarily flows from the teachings of the prior art. See *Ex Parte Levy*, 17 U.S.P.Q.2d 1461, 1464 (Bd. Pat. App. & Int. 1990). The burden to rebut shifts to Applicants only after the Examiner has established inherency by presenting these factual and technical grounds. *In re Best*, 195 U.S.P.Q. 430, 433 (C.C.P.A. 1977). The Examiner has offered neither a factual nor a technical basis for the assertion, for example, that *Sugano* inherently teaches the LOI value recited in dependent claim 18.

Applicants therefore respectfully request that the Examiner withdraw this rejection of claims 1-3, 5, and 12-20, which are allowable over *Sugano*.

**B. Rejection over Japanese Patent Publication No. 5-110218 ("Sasaki")**

The Examiner has rejected claims 40-47 under 35 U.S.C. § 102(b) as anticipated by Japanese Patent Publication No. 5-110218 (hereinafter referred to as *Sasaki*), for reasons discussed at page 3 of the Office Action. According to the Examiner, *Sasaki* teaches an electronic support comprising a laminate that is formed by impregnating a substrate with a synthetic resin and an inorganic filler. The Examiner further states that *Sasaki* teaches that the resin is a film-forming material. Applicants respectfully traverse this rejection for the reasons set forth below.

Applicants' respectfully submit that the rejected claims are patentably distinguishable from the prior art. Applicants submit that the support cited by the Examiner does not disclose each and every element, either expressly or inherently, as set forth in claims 40-47. See M.P.E.P. § 2131. *Sasaki* does not disclose a fiber or

cloth with at least a partial resin compatible coating. Instead, *Sasaki* discloses, for example, a laminate composed of two layers, one of which contains a synthetic resin as a component. *Sasaki*, at 2. Much detail is included in *Sasaki* about the composition and makeup of the resin itself. *Sasaki* fails, however, to disclose any coating on the substrate material that exists prior to the incorporation of the resin material, much less a resin compatible material that does not need to undergo de-oiling or cleaning.

In contrast, the presently claimed invention discloses, among other things, at least an electronic support that comprises a non-degreased fabric, at least a portion of which has a coating which is compatible with a matrix material. Unlike the invention in *Sasaki*, the coating in the presently claimed invention exists on the fabric prior to the incorporation of the matrix material. In light of this disparity, *Sasaki* does not teach every aspect of the claimed invention either explicitly or impliedly. Applicants therefore respectfully request that the Examiner withdraw the rejections to claims 40-47, which are allowable over *Sasaki*.

## **V. Conclusion**

In view of the foregoing remarks, Applicants respectfully submit that the present application is not anticipated in view of the references cited against it. Applicants respectfully request the Examiner's reconsideration and reexamination of the application, and the timely allowance of the pending claims.

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Please grant any extensions of time required to enter this response and  
charge any additional required fees to our Deposit Account No. 06-0916.

Respectfully submitted,

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Dated: January 23, 2003

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Application Number: 09/620,523  
Attorney Docket Number: 03626.0034-03

## THE APPENDIX TO THE AMENDMENTS OF January 23, 2003

### Version with Markings to Show Changes Made

#### Amendments to the Specification

On page 1, substitute the paragraph which starts on line 6 with the following paragraph:

This application is a continuing application of U.S. Patent Application Serial No. 09/5[6]68,916 of Novich et al. entitled "Impregnated Glass Fiber Strands and Products Including the Same", filed May 11, 2000, now abandoned, which is a continuing application of U.S. Patent Application Serial No. 09/548,379 of B. Novich et al. entitled "Impregnated Glass Fiber Strands and Products Including the Same", filed April 12, 2000, now abandoned, which is a continuing application of U.S. Patent Application Serial No. 09/527,034 of Novich et al. entitled "Impregnated Glass Fiber Strands and Products Including the Same", filed March 16, 2000, now abandoned, which is (a) a continuation-in-part of International Application PCT/US99/21443 of B. Novich et al. entitled "Glass Fiber-Reinforced Prepregs, Laminates, Electronic Circuit Boards and Methods for Assembling Fabric", with an international filing date of October 8, 1999, which is a continuation-in-part of U.S. Patent Application Serial No. 09/170,578 of B. Novich et al. entitled "Glass Fiber-Reinforced Laminates, Electronic Circuit Boards and Methods for Assembling a Fabric", filed October 13, 1998, now abandoned, which is a continuation-in-part of U.S. Patent Application Serial No. 09/130,270 of B. Novich et al. entitled "Glass Fiber-Reinforced Laminates, Electronic Circuit Boards and Methods

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for Assembling a Fabric", filed August 6, 1998, now abandoned, which is a continuation-in-part application of U.S. Serial No. 09/034,525 of B. Novich et al. entitled "Inorganic Lubricant-Coated Glass Fiber Strands and Products Including the Same" filed March 3, 1998, now abandoned; (b) also a continuation-in-part of U.S. Patent Application Serial No. 09/170,780 of B. Novich et al. entitled "Inorganic Lubricant-Coated Glass Fiber Strands and Products Including the Same" filed October 13, 1998, now abandoned, which is a continuation-in-part application of U.S. Patent Application Serial No. 09/034,525 of B. Novich et al. entitled "Inorganic Lubricant-Coated Glass Fiber Strands and Products Including the Same" filed March 3, 1998, now abandoned; (c) also a continuation-in-part of U.S. Patent Application Serial No. 09/170,781 of B. Novich et al. entitled "Glass Fiber Strands Coated With Thermally Conductive Inorganic Solid Particles and Products Including the Same" filed October 13, 1998, now abandoned, which is a continuation-in-part application of U.S. Application Serial No. 09/034,663 filed March 3, 1998, now abandoned; (d) also a continuation-in-part of U.S. Patent Application Serial No. 09/170,579 of B. Novich et al. entitled "Methods for Inhibiting Abrasive Wear of Glass Fiber Strands" filed October 13, 1998, now abandoned, which is a continuation-in-part application of U.S. Patent Application Serial No. 09/034,078 filed March 3, 1998, now abandoned; (e) also a continuation-in-part of International Application PCT/US99/21442 to B. Novich et al. entitled "Impregnated Glass Fiber Strands and Products Including the Same", with an international filing date of October 8, 1999, which is a continuation-in-part of U.S. Patent Application Serial No. 09/170,566 of B. Novich et al. entitled "Impregnated Glass Fiber Strands and Products Including the Same" filed October 13, 1998, now abandoned, which is a continuation-in-part



application of U.S. Patent Application Serial No. 09/034,077 filed March 3, 1998, now abandoned; and (f) also a continuation-in-part of U.S. Patent Application Serial No. 09/170,565 of B. Novich et al. entitled "Inorganic Particle-Coated Glass Fiber Strands and Products Including the Same" filed October 13, 1998, now abandoned, which is a continuation-in-part application of U.S. Patent Application Serial No. 09/034,056 filed March 3, 1998, now abandoned.

On page 2, substitute the second full paragraph which starts on line 19 with the following paragraph:

This application is related to U.S. Patent Application Serial No. [ ]  
09/620,524 of B. Novich et al. entitled "[Inorganic Particle-Coated] Impregnated Glass Fiber Strands and Products Including the Same" filed same date as the instant application, now U.S. Patent No. 6,419,981, U.S. Patent Application Serial No. [ ]  
[ ] 09/620,525 of B. Novich et al. entitled "[Inorganic Particle-Coated] Impregnated Glass Fiber Strands and Products Including the Same" filed same date as the instant application, and U.S. Patent Application Serial No. [ ]  
09/620,526 of B. Novich et al. entitled "[Inorganic Particle-Coated] Impregnated Glass Fiber Strands and Products Including the Same" filed same date as the instant application.